

78, drawn to a monoclonal antibody); and Group F (claims 68-70, 73-75 and 80-81, drawn to a polyclonal antibody).

The Restriction Requirement mailed April 8, 2003 is further to the Restriction Requirement mailed October 25, 2002. The Examiner indicated the current Restriction was presented to correct the deficiency that Group IV was not included in the Restriction Requirement mailed October 25, 2002. It is noted, however, that all claims were included in Groups I, II, III, V, and VI in the Restriction Requirement mailed October 25, 2002, and therefore, it is believed the current Restriction Requirement is unnecessary.

It is also noted that unity of invention was found in the Written Opinion and International Preliminary Examination Report of this application in the International Stage, and since the same standard for unity of invention applies in the National Stage, it is believed the requirement of unity of invention is met in the present invention.

The Restriction Requirement states "Groups A through E do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features." The Restriction Requirement continues:

inventions A-D employ an antibody (special technical feature) to detect oxidative related parameters. However two antibodies or special technical features are claimed. Further they can be produced by hybridoma cell line K2.F1 or hybridoma cell line K2.F1.6. Group E is directed to a monoclonal antibody, while Group F is directed to a polyclonal antibody. Theses [sic] two antibodies/compounds have different and diverse structural limitations and are produced by different procedures (see claim 65 for the monoclonal antibody and claim 80 for the polyclonal antibody), therein the invention has two special technical features, which may be utilized, in any of the method inventions. Further each of the methods is distinct in that they have diverse method steps and utilize different reagents. Specifically the method of Group A detects a biomarker of oxidative stress, the method of Group B removes oxidatively damaged protein from a sample via a single antibody, the method of Group C merely detects oxidativley [sic] damaged proteins via dual antibodies, while the method of Group D is directed to disease detection and treatment. Accordingly, Groups A through E, lack the same corresponding technical feature and do not relate to a single general inventive concept under PCT Rules 13.1 and 13.2.

In response, applicants elect Group A, claims 1-44, with traverse. The Restriction Requirement misconstrues the general inventive concept and special technical feature given by

the present invention. The special technical feature is the biomarker of oxidative stress, not the antibodies used to detect the biomarker of oxidative stress, as stated in the Restriction Requirement.

It is believed the unity of invention requirement is fulfilled in this application because all claims form a single general inventive concept, in accordance with PCT Rule 13.1 and PCT Rule 13.2. The Groups in the Restriction Requirement all involve the common special technical feature—the biomarker of oxidative stress. In particular, Group A is directed to a method to detect the biomarker of oxidative stress. Group B is directed to a method of removing oxidatively damaged protein from a sample, comprising contacting said sample with an antibody or antigen binding fragment thereof which is specific for an oxidized sulfur- or selenium-containing amino acid (the biomarker for oxidative stress). Group C is directed to a method of detecting oxidatively damaged proteins, peptides or proteinaceous aggregates in a sample comprising contacting the sample with an antibody or antigen binding fragment that binds oxidatively damaged protein. Group D is directed to a method for detecting, diagnosing or monitoring the course of a disease associated with oxidative stress by evaluating the level of biomarker for oxidative stress in a sample. Group E is directed to monoclonal antibodies which bind a biomarker of oxidative stress. Group F is directed to a polyclonal antibody which binds a biomarker of oxidative stress. The special technical feature present in all the claims is the biomarker for oxidative stress. This common special technical feature fulfills the requirement for unity of invention.

The Restriction Requirement stated on page 4, point 5: “two antibodies or special technical features are claimed. Further they can be produced by hybridoma cell line K2.F1 or hybridoma cell line K2.F1.6. Group E is directed to a monoclonal antibody, while Group F is directed to a polyclonal antibody.” This statement is incorrect. Only the monoclonal antibody is produced by the hybridoma cell line, not the polyclonal antibody.

If the Examiner maintains a lack of unity of invention of the claims, it is believed a more appropriate grouping of the claims should be made as follows: Group A (claims 1-44) drawn to a method to identify a novel biomarker of oxidative stress in a sample; Group B (claims 54-81) drawn to detection of the elevated concentration of the biomarker of oxidative stress; and Group C (claims 45-53) drawn to removal of oxidatively damaged protein from a sample. In Group B, one method used to detect an elevated concentration of the biomarker of oxidative stress in diseased states is to use the monoclonal antibody derived from hybridoma K2.F1.6. Other

methods to detect an elevated concentration of the biomarker of oxidative stress in disease states are possible, including using other monoclonal antibodies derived from K2.F1 or using polyclonal antibodies.

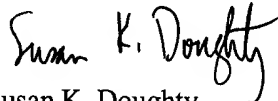
If the Examiner maintains the grouping in the Restriction Requirement mailed April 8, 2003, at least groups E and F should be combined, since the claims in these groups represent two methods of detecting the biomarker of oxidative stress, and are not two separate special technical features of the invention.

Reconsideration and withdrawal of the Restriction Requirement is respectfully requested.

CONCLUSION

It is believed that no fee is due with the submission of this Response. If this is incorrect, however, please charge any fee required, including the fee for any extensions of time required, or credit any overpayment to Deposit Account No. 07-1969.

Respectfully submitted,



Susan K. Doughty
Reg. No. 43,595

GREENLEE, WINNER AND SULLIVAN, P.C.
5370 Manhattan Circle, Suite 201
Boulder, CO 80303
Telephone: (303) 499-8080
Facsimile: (303) 499-8089
E-mail: winner@greenwin.com
Attorney docket No. 68-97